Appl. No. 10/658,530
Preliminary Amendment dated March 4, 2005

500.43115X00

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1-20. (Canceled)

21. (New) A storage system, comprising:

a plurality of controllers controlling to transfer data to a plurality of storage

regions;

a plurality of data lines coupled to said controllers and being used to transfer

data from said controllers to said storage regions;

a plurality of disk drive units coupled to said data lines and having said

storage regions; and

a display coupled to said controllers and displaying information related to said

storage system;

wherein one or more of said controllers transfer data on a first data line of said

plurality of data lines and transfer a command on a second data line of said plurality

of data lines, if said storage system has a failure after transferring data on said

second data line,

wherein said command is used to obtain an area of said failure, and

wherein said display displays said area of said failure.

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22. (New)   A storage system according to claim 21, wherein:

one or more of said controllers transfer write data on said first data line and

control to divide said second data line into a plurality of parts and transfer said

command to one part of said parts of said second data line, and

said display displays said area of said failure after said second data line is

divided.

23. (New) A storage system according to claim 21, further comprising:

a first housing having a one or more first disk drive units of said plurality of

disk drive units and a first part of said second line;

a second housing having a one or more second disk drive units of said

plurality of disk drive units and a second part of said second line; and

one or more of said controllers coupled to said first data line and said second

data line;

wherein said one or more of said controllers transfer write data on said first

data line and control to disconnect said second part of said second data line from

said first part of said second data line and transfer said command to said first part of

said second data line, and

said display displays said area of said failure after said second part of said

second data line is disconnected.

24. (New) A storage system according to claim 21, wherein:

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said first data line is used read/write data to one or more said disk drive units,

if said area of said failure is on said second data line, and

said second data line is used read/write data to said one or more said disk

drive units, if said area of said failure is not on said second data line.

25. (New) A storage system according to claim 21, further comprising:

a host computer coupled to said controller;

wherein said host computer sends a write command to said controller and can

receive acknowledgement of completion of said write command during a check for

said area of said failure.

26. (New) A storage system according to claim 21, wherein:

said command travels around on said second data line.

27. (New) A storage system according to claim 21, wherein:

said command is relayed by one or more of said disk drive units coupled to

said second data line, if said second data line does not have said failure.

28. (New) A storage system according to claim 21, wherein:

said command is used to initialize said second data line.

29. (New) A storage system according to claim 21, wherein:

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said command is a Loop Initialization Primitive (LIP) command.

30. (New) A storage system according to claim 21, wherein:

said second data line is a Fibre Channel Arbitrated Loop (FC-AL).

31. (New)   A storage system according to claim 21, wherein:

said area of said failure is located between said second data line and one of said plurality of disk drive units.

32. (New) A storage system according to claim 21, wherein:

said area of said failure is in one of said plurality of disk drive units.

33. (New) A storage system according to claim 21, further comprising:

a first housing having one or more first disk drive units of said plurality of disk drive units and a first part of said plurality of data lines; and

a second housing having one or more second disk drive units of said plurality of disk drive units and a second part of said plurality of data lines;

wherein said area of said failure is in one of said first housing and said second housing.

34. (New) A storage system according to claim 21, wherein:

said first data line coupled to a first controller of said plurality of controllers,

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said second data line coupled to a second controller of said plurality of controllers, and

said second controller controls to sending of said command to said second data line.

35. (New) A storage system according to claim 2l, wherein:

said plurality of disk drive units are coupled to said first data line and said second data line.

36. (New) A storage system according to claim 21, further comprising:

a first housing having a one or more first disk drive units of said plurality of disk drive units;

a second housing having a one or more second disk drive units of said plurality of disk drive units;

a first controller of said controllers coupled to said first data line and a third data line of said plurality of data lines; and

a second controller of said controllers coupled to said second data line and a fourth data line of said plurality of data lines;

wherein said first disk drive units are coupled to said first data line and said second data line, and

wherein said second disk drive units are coupled to said third data line and said fourth data line.

37. (New)   A storage system according to claim 2l, further comprising:

a first housing having a one or more first disk drive units and a one or more second disk drive units of said plurality of disk drive units;

a second housing having a one or more third disk drive units and a one or more fourth disk drive units of said plurality of disk drive units;

a first controller of said controllers coupled to said first data line and a third data line of said plurality of data lines; and

a second controller of said controllers coupled to said second data line and a fourth data line of said plurality of data lines;

wherein said first disk drive units are coupled to said first data line and said second data line,

wherein said second disk drive units are coupled to said third data line and said fourth data line,

wherein said third disk drive units are coupled to said first data line and said second data line, and

wherein said fourth disk drive units are coupled to said third data line, and said fourth data line.

38. (New) A storage system, comprising:

one or more controllers controlling to transfer data to a plurality of storage regions;

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a plurality of data lines coupled to said controllers and being used to transfer data from said controllers to said storage regions;

a plurality of disk drive units coupled to said data lines and having said storage regions; and

a display coupled said controller and displaying information related to said storage system;

wherein said controllers transfer a command on a second data line of said plurality of data lines and transfer data on a first data line of said plurality of data lines, if said storage system has a failure after transferring data on said second data line,

wherein said command travels around on said second data line, and

wherein said display displays an area of said failure.

39. (New)   A storage system, comprising:

one or more controllers controlling to transfer data to a plurality of storage regions;

a plurality of data lines coupled to said controllers and being used to transfer data from said controllers to said storage regions;

a plurality of disk drive units coupled to said data lines and having said storage regions; and

a display coupled said controller and displaying information related to said storage system;

wherein said controllers relay data on a first data line of said plurality of data

lines and relay a command on a second data line of said plurality of data lines, if said

storage system has a failure after relaying data on said second data line,

wherein said command is used to initialize said second data line,

wherein said display displays an area of said failure.

40. (New) A storage system, comprising:

a plurality of controllers controlling to transfer data to a plurality of storage

regions;

a plurality of data lines coupled to said controllers and being used to transfer

data from said controllers to said storage regions; and

a plurality of disk drive units coupled to said data lines and having said

storage regions;

wherein one or more said controllers transfers a command on a second data

line of said plurality of data lines and transfers data on a first data line of said plurality

of data lines, if said storage system has a failure after transferring data on said

second data line,

wherein said command is used to obtain an area of said failure.

41. (New) A storage system, comprising:

a plurality of controllers controlling to transfer data to a plurality of storage

regions;

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a plurality of data lines coupled to said controllers and being used to transfer data from said controllers to said storage regions;

a plurality of disk drive units coupled to said data lines and having said storage regions; and

a display coupled said controller and displaying information related to said storage system;

wherein data are relayed on a first data line of said plurality of data lines and a command is relayed on a second data line of said plurality of data lines, if said storage system has a failure after relaying data on said second data line,

wherein said command is used to obtain an area of said failure, and

wherein said display displays said area of said failure.

42. (New) A storage system, comprising:

one or more controllers controlling to transfer data to a plurality of storage regions;

a plurality of data lines coupled to said controllers and being used to transfer data from said controllers to said storage regions;

a plurality of disk drive units coupled to said data lines and having said storage regions; and

a display coupled to said controller and displaying information related to said storage system;

wherein said storage system performs the steps of:

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transferring data on a first data line of said plurality of data lines,

having a failure between said first data line and one of said disk drives

after said transferring data on said first data line,

transferring a command on said first data line and transferring data on

a second data line of said plurality of data lines after said having said failure, said

command being used to obtain a position of said failure, and

displaying said position of said failure on said display.